WHAT IS CLAIMED IS:

1. An implantable medical endoprosthesis bumper having a retainer configured to interdigitate with a cell of an implantable medical endoprosthesis to unidirectionally position the implantable medical endoprosthesis with respect to the bumper.

2. The implantable medical endoprosthesis bumper of claim 1, wherein the implantable medical endoprosthesis bumper includes a bumper body, and the retainer protrudes radially from the bumper body.

3. The implantable medical endoprosthesis bumper of claim 2, wherein the retainer comprises a flap that protrudes radially from the bumper body.

4. The implantable medical endoprosthesis of claim 2, wherein the retainer comprises a hook, a spike, or a barb.

5. The implantable medical endoprosthesis of claim 1, wherein the retainer comprises a wax.

6. The implantable medical endoprosthesis of claim 1, wherein the retainer is capable of flexing to interdigitate with the cell or to disengage from the cell.

7. A catheter having an implantable medical endoprosthesis bumper, the bumper including a retainer configured to interdigitate with a cell of an implantable medical endoprosthesis to unidirectionally position the implantable medical endoprosthesis with respect to the bumper.

8. An implantable medical endoprosthesis delivery system, comprising:

a catheter having an implantable medical endoprosthesis bumper, the bumper including a retainer configured to interdigitate with a cell of an implantable medical

endoprosthesis to unidirectionally position the implantable medical endoprosthesis with respect to the bumper; and

a sheath at least partially surrounding the catheter,

wherein the catheter and the sheath are configured so that the implantable medical endoprosthesis can be disposed therebetween.

9. The endoprosthesis delivery system of claim 8, further comprising the implantable medical endoprosthesis between the catheter and the sheath.

10. A method of positioning an implantable medical endoprosthesis on a catheter, the method comprising:

unidirectionally positioning the implantable medical endoprosthesis with respect to the catheter without reducing a diameter of the implantable medical endoprosthesis.

11. The method of claim 10, wherein the catheter comprises a bumper including a retainer configured to interdigitate with a cell of the implantable medical endoprosthesis.

12. The method of claim 10, wherein the catheter comprises a catheter body including a retainer configured to interdigitate with a cell of the implantable medical endoprosthesis.

13. The method of claim 11, wherein the implantable medical endoprosthesis has a partially open cell, and unidirectionally positioning the implantable medical endoprosthesis with respect to the catheter comprises flexing the partially open cell to interdigitate the partially open cell with the retainer.

14. A method of positioning an implantable medical endoprosthesis on a catheter, the method comprising:

interdigitating a cell of the implantable medical endoprosthesis with a retainer of the catheter without reducing a diameter of the implantable medical endoprosthesis.

15. The method of claim 14, wherein the catheter comprises a bumper including the retainer.

16. The method of claim 15, wherein the bumper includes a bumper body, and the retainer protrudes radially from the bumper body.

17. The method of claim 14, wherein the catheter includes a catheter body comprising the retainer.

18. The method of claim 14, wherein interdigitating a cell of the implantable medical endoprosthesis with a retainer of the catheter comprises expanding the retainer from a first size to a second size.

19. The method of claim 14, wherein the retainer comprises a wax and interdigitating a cell of the implantable medical endoprosthesis with the retainer comprises molding the wax to extend into the cell.

20. A method of positioning an implantable medical endoprosthesis on a catheter, the method comprising:

moving the implantable medical endoprosthesis in a longitudinal direction of the catheter to interdigitate a cell of the implantable medical endoprosthesis with the catheter without reducing a diameter of the implantable medical endoprosthesis.

21. The method of claim 20, wherein the catheter comprises a bumper including the retainer configure to interdigitate the cell of the implantable medical endoprosthesis.

22. The method of claim 21, wherein the bumper includes a bumper body, and the retainer protrudes radially from the bumper body.

23. The method of claim 20, wherein the catheter comprises a catheter body including the retainer.

24. A method of positioning an implantable medical endoprosthesis on a catheter, the method comprising:

interdigitating a partially open cell of the implantable medical endoprosthesis with a retainer of the catheter.

25. The method of claim 24, wherein interdigitating a partially open cell of the implantable medical endoprosthesis with a retainer of the catheter comprises flexing the partially open cell.

26. The method of claim 24, wherein interdigitating a partially open cell of the implantable medical endoprosthesis with a retainer of the catheter comprises expanding the retainer.

27. The method of claim 24, wherein the retainer comprises a wax and interdigitating a cell of the implantable medical endoprosthesis with the retainer comprises molding the wax to extend into the cell.

28. A method of positioning an implantable medical endoprosthesis on a catheter, the method comprising:

expanding a retainer of the catheter to interdigitate a cell of the implantable medical endoprosthesis with the catheter.

29. The method of claim 28, wherein the retainer comprises a shape memory material.

30. The method of claim 28, wherein the retainer comprises a swellable material.

31. The method of claim 28, further comprising disposing the implantable medical endoprosthesis over the retainer prior to expanding the retainer.

32. The method of claim 28, wherein the catheter comprises an implantable medical endoprosthesis bumper comprising the retainer.

33. The method of claim 28, wherein the catheter comprises a catheter body comprising the retainer.

34. A catheter having a catheter body, the catheter body including a retainer configured to interdigitate with a cell of an implantable medical endoprosthesis to unidirectionally position the implantable medical endoprosthesis with respect to the catheter body.

35. The catheter of claim 34, wherein the retainer protrudes radially from the catheter body.

36. The catheter of claim 34, wherein the retainer is capable of flexing to interdigitate with the cell or to disengage from the cell.

37. An implantable medical endoprosthesis delivery system, comprising:

a catheter having a catheter body, the catheter body including a retainer configured to interdigitate with a cell of an implantable medical endoprosthesis to unidirectionally position the implantable medical endoprosthesis with respect to the catheter body; and

a sheath at least partially surrounding the catheter,

wherein the catheter and the sheath are configured so that the implantable medical endoprosthesis can be disposed therebetween.

38. An implantable medical endoprosthesis having first and second ends along a longitudinal direction, and a plurality of cells including a partially open cell located at

the first end, wherein the partially open cell is capable of flexing in a plane parallel to the longitudinal direction.

39. The implantable medical endoprosthesis of claim 38, wherein the partially open cell is capable of interdigitating with a retainer of a stent bumper.